



MX PRO

HD Digital Video Roadcorder™

User Manual

R07

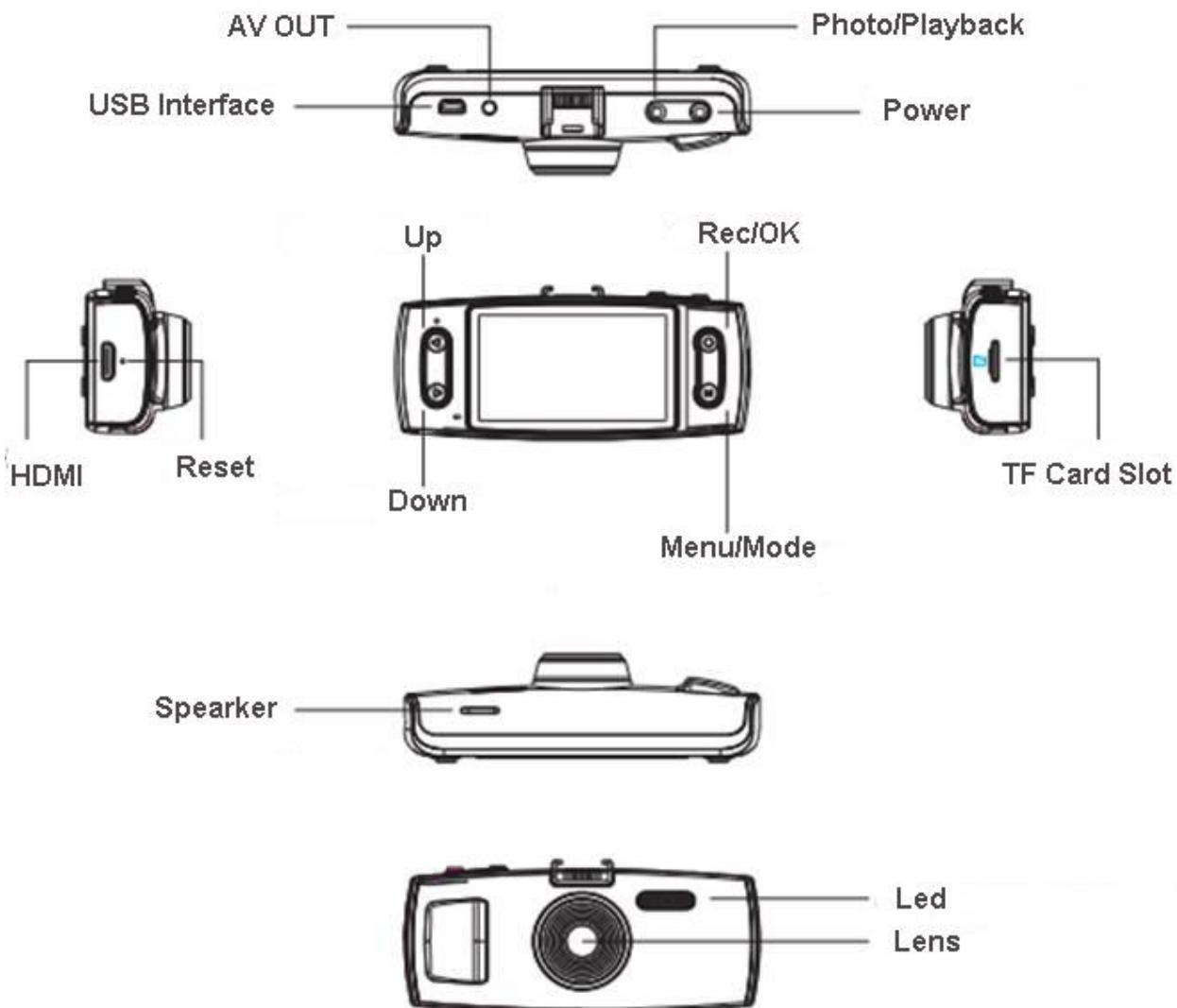
June 2013

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The information in this manual is subject to change without notice.

Annex A: Product Layout



Technical Specifications

| | |
|------------------------------|---|
| Resolution | Full HD 1080p -1920x1080 @ 30fps, 1440x1080 @ 30fps Full HD 720p - 1280x720 @ 30fps, VGA - 800x480 @ 60fps, 640x480 @ 60fps |
| Lens | Wide Angle Lens 120°, 4 fixed focus lens, F/2.0, focal length of 3.4mm |
| Image Sensor | 1/2.5 "5 megapixel CMOS sensor |
| TFT Screen | 2.7" TFT - 960 X 240pixels |
| The chip | Ambarella A2S60 |
| Internal Memory | Embedded with 256MB |
| GPS module | External set |
| Storage Card Type | MicroSD Card - Maximum support 32GB |
| Format | JPEG (EXIF2.2), DCF |
| Video format | H.264 (MOV) |
| The zoom video | 3x digital zoom (Only under camera mode) |
| Audio | Built-in microphone / speaker (AAC) |
| Exposure compensation | -3.0EV~+3.0EV |
| Loop Recording | Off, 1 minutes, 3 minutes, 5 minutes |
| Auto Power Off | Off, 1 minute, 3 minutes, 5 minutes |
| Auto. shut off screen | Off, 1 minute, 3 minutes, 5 minutes |
| PC Interface | USB2.0 (high speed) |
| Video/AV output | NTSC / PAL |
| HD TV interface | HDMI signal output, the highest 1920X1080 P50 or 1920X1080 P60, |
| Power | Built-in 500mAh 3.7V polymer battery |

General Troubleshooting

| Question | Reason | Solution |
|---|---|---|
| Device cannot be turn on | Device might be low in battery. | Charge the Battery. |
| Auto power-off | 1. Automatic shutdown function is enabled. 2. Low Battery. | 1. Enter the setup menu to change [shutdown time] to off. 2. Charge the battery |
| Unable to take pictures or record videos | MicroSD card might be full. | Check your microSD card's memory space. Delete files if required. |
| Auto stop recording in video mode | Use a compatible SDHC microSD card for HD video recording. | Get a microSD card that has minimum of Class 10 speed. |
| Encounter "file error" when trying to playback pictures or videos | MicroSD card might be corrupted. There bad sectors in the card. | Reformat the microSD card. |
| No image is displayed on a high-definition TV screen | 1. Cable plug might not be plugged in properly. 2. Wrong TV Input mode | 1. Ensure AV/ HDMI cable is plug into the TV properly. 2. Refer to the back panel of your TV to track the correct TV input. Make sure you have selected the correct input. |
| Hazy Images | Lens might be dirty. | Check if there are fingerprints or dust on the lens. Clean it with a micro fabric cloth if necessary. |
| Supply light cannot be turn on | Device might be low in battery. Supply light will not be able to on when power is insufficient. | Charge the Battery. |
| There are horizontal stripes interference on the image | This could be due to wrong light frequency setting. | Please set according to the local power supply respectively; 50Hz or 60Hz. For SG/MY: 50hz |

Getting started with Marbella MXPro HD Video Roadcorder™



Fully charged



not fully charged



low power

Charging:

Warnings for charging:

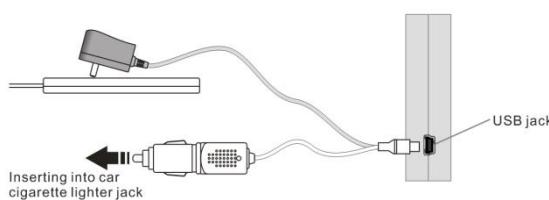
1. A new battery may be empty and not charged before you get the device.
2. In normal charging with AC charger (Not included in the package), please make sure to charge it for 2 – 2.5 hours to get it fully charged.

Note: A new battery will reach its best performance after number cycles of charging and discharging. If the device is not used for long time, it is better to charge it to full capacity every 2 or 3 months during storage.

Note: The device will not be charge via USB from the computer unless USB charger is plug directly to the GPS logger port. (Not included in the package)

Car Lighter Charger:

Please insert the car charger into car cigarette lighter jack, then plug into the USB jack (see the illustration below).

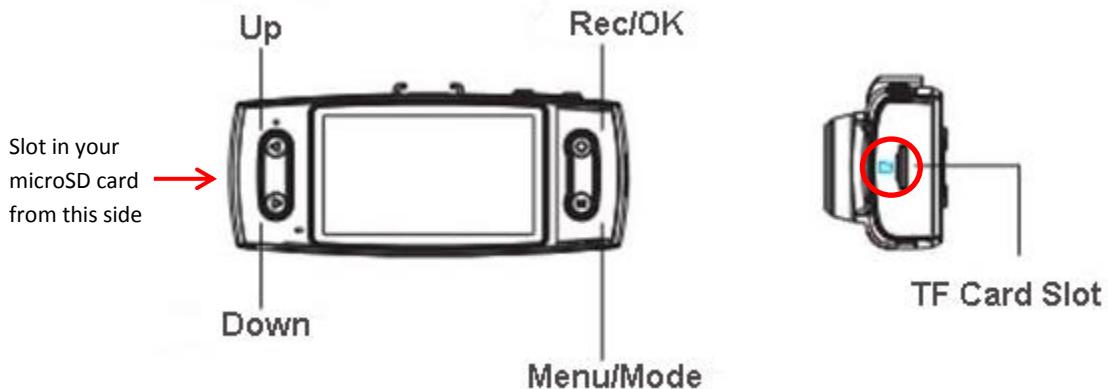


DVR automatically starts recording when it is connected to the power cable. When you remove the power cable, DVR will automatically shut down after 10 seconds.

Note: Always use external DC 5V output car charger .When you use car charger, please start car engine first, then connect it to the device to avoid possible damage to the device due to overloaded pulse current during ignition. Please pull it out when you stop the engine, and plug it in again after next ignition.

:

Install and remove the memory card



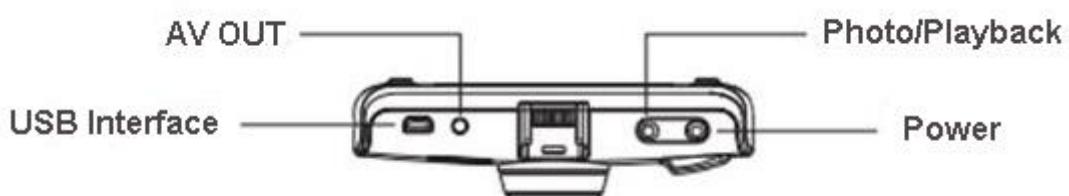
To install the microSD card

Follow the TF Card slot icon displayed on the device and insert the microSD card gently

To remove the microSD card

Push in the microSD card slightly and it will be ejected automatically.

POWER ON/ OFF

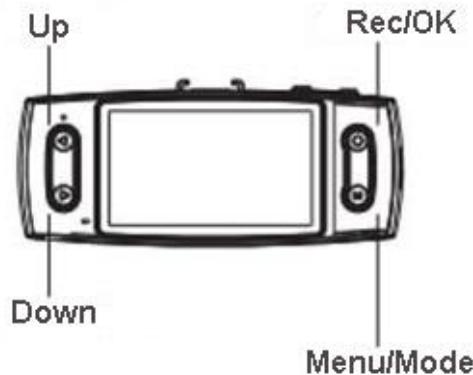


Top View of Marbella MXPRO

ON/ OFF device

Hold on to the power button for 5 seconds to turn on and shut off.

Set to Auto Shutdown



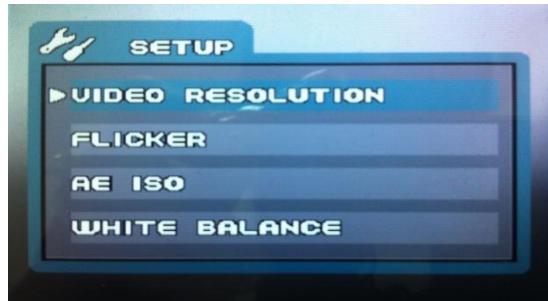
Back View of Marbella MXPRO

- Press “M” button once
- Press “Down” button for 7 times till you see “Auto Power Off” feature on the menu page
- Press on “O” button (Rec/Ok button) once
- Toggle the specific timings with the “Up” & “Down” and press “O” button.

Note: Once you have enable this mode, device will automatically shutdown when the camera does not have any operations within a set time.

Setting of Time/Date

- Press “M” button will lead to the “SETUP” page



- Toggle with the “Up” and “Down” buttons till “TIME SETUP” is shown on the screen
- Press “O” button to confirm
- Set the time and date accordingly
- Press “O” button to confirm
- Press “M” button to Exit

Video mode

Resolution: Full HD (1920 X 1080P)/ 1080P 30fps/ 720P 30fps/ WVGA 60fps/ VGA

Effect

Frequency/ Flicker: 50Hz/ 60Hz

AE ISO: Auto/ 100/ 200/ 400

White Balance: Auto/ Sunny/ Cloudy/ Fluorescent/ Incandescent/

Exposure Offset/ AE Bias: 0/ 0.3/ 0.7/ 1/ 1.3/ 1.7/ 2/ -2/ -1.7/ -1.3/ -1/ -0.7/ -0.3

AE Meter Mode: Center/ Spot/ Average

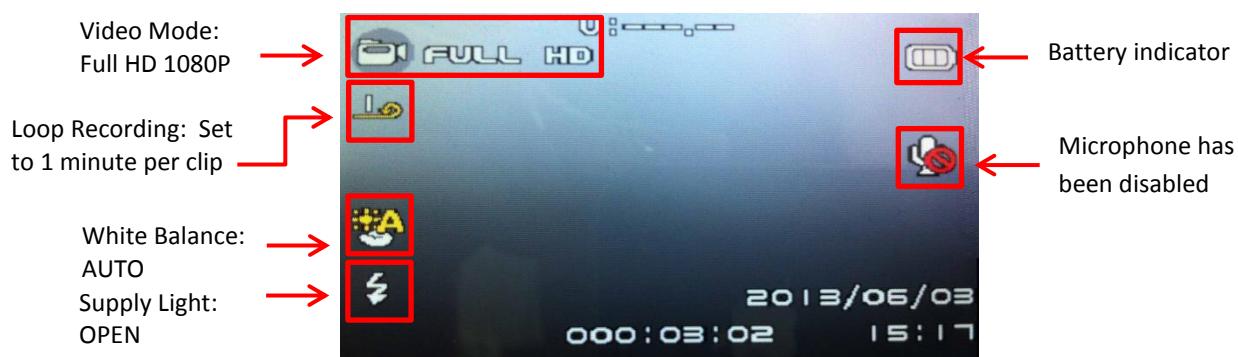
Set to the best video quality by the following steps:

- Press “M” button will lead to the “SETUP” page



- Select on Video Resolution
- Press on “O” to confirm
- Toggle with the “Up” and “Down” buttons to select the recording mode
- Most recommended mode – FULL HD. Please select FULL HD.
- Press “O” to confirm
- Press “M” to exit screen

To Record Video



- Press on “O” (Ok/ Rec button)
- Once “REC” button is press, recording will starts
- Press on “REC” again to stop recording

Note: During recording, a red spot on the left hand side of the display screen will starts blinking.

Lock files manually while recording

- **To Enable / Disable Lock**

During recording, hold on “M” button for 3 seconds. To disable the manual lock, hold on “M” button for 3 seconds again.

Note: A yellow lock icon will be shown on the right hand side of the screen.

To Enable/ Disable Microphone

- Toggle with the “Up” and “Down” buttons till “VIDEO RECORD MODE” is shown on the screen
- Press “O” button to confirm
- Set to “VIDEO” to disable microphone or Toggle with the “Up” and “Down” buttons to Set to “VIDEO+AUDIO” to enable microphone
- Press “O” button to confirm
- Press “M” button to Exit

Enable Motion Sensor

- Press “M” button will lead to the “SETUP” page
- Toggle with the “Up” and “Down” buttons till “MOTION DETECT” is shown on the screen
- Press “O” button to confirm
- Toggle with the “Up” and “Down” buttons to select “ON”
- Press “O” button to confirm

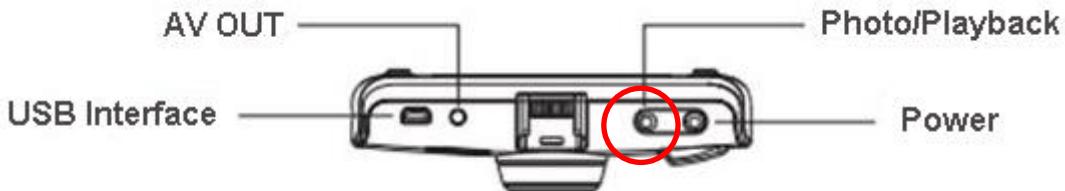
Note: Recording will automatically on when camera detects any movements.

Loop Recording Setting

- Press “M” button will lead to the “SETUP” page
- Toggle with the “Up” and “Down” buttons till “LOOP SETTING” is shown on the screen
- Press “O” button to confirm
- Toggle with the “Up” and “Down” buttons to select between “OFF/ 1 / 3 / 5 min
- Press “O” button to confirm

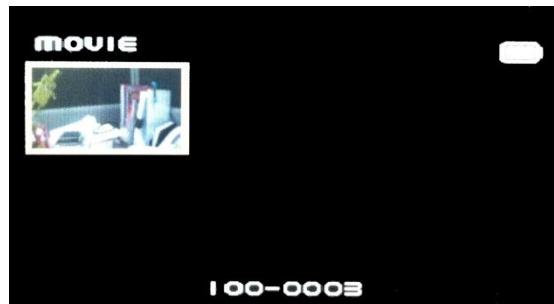
Note: This is a recording process which continues to record at the beginning, erasing the previously recorded material and replacing it with the new content.

Video Playback



Top View of Marbella MXPRO

- Press “O” button to stop recording
- Hold on to the “Photo/Playback” button for 3 seconds to change to playback mode



Sample of the video playback view

- Toggle with the “Up” and “Down” buttons to select the respective videos to playback
- Press on “O” button to select
- Press on “O” button to play
- To go back to video recording mode, hold on to the “Photo/Playback” button for 3 seconds again

Delete All Videos

- Under playback mode, press on “M” button to delete
- Press on “O” button to delete
- Toggle with the “Up” and “Down” buttons to “ALL” to delete that specific video
- Press on “M” button to again to Exit

Delete Individual Video

- Under playback mode, toggle with the “Up” and “Down” buttons to select the individual video you wish to delete
- Press on “O” button after you have highlighted the photo in Yellow
- Press on “M” button

- Toggle with the “Up” and “Down” buttons to “YES”
- Press on “O” button to confirm

Camera mode

Photo Size

- 3M/ 5M/ 8M/ 12M

Effect

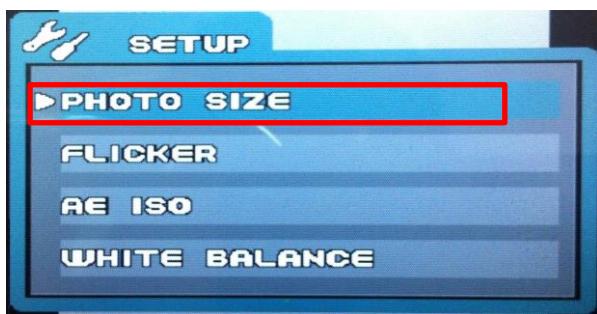
- Frequency/ Flicker: 50Hz/ 60Hz
- AE ISO: Auto/ 100/ 200/ 400
- White Balance: Auto/ Sunny/ Cloudy/ Fluorescent/ Incandescent/
- Exposure Offset/ AE Bias: 0/ 0.3/ 0.7/ 1/ 1.3/ 1.7/ 2/ -2/ -1.7/ -1.3/ -1/ -0.7/ -0.3
- AE Meter Mode: Center/ Spot/ Average

To switch from Video to Camera Mode:

Hold on to “M” button for 3 seconds to toggle the mode from video to camera

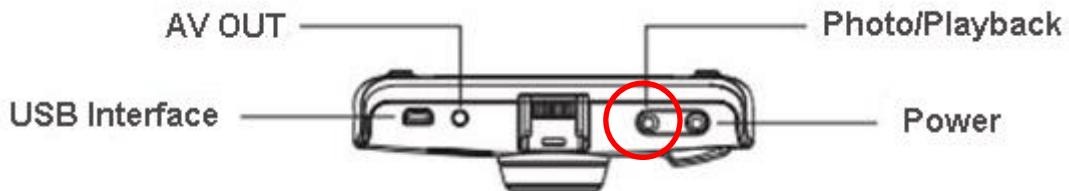
Set to the best pictures quality by the following steps:

- Press “M” button will lead to the “SETUP” page



- Select on Photo Size
- Press on “O” to confirm
- Toggle with the “Up” and “Down” buttons to select the size of the image
- Most recommended mode – 5M
- Press “O” to confirm
- Press “M” to exit screen

To take Photo



Top View of Marbella MXPRO

- Press on “Photo/Playback” button once

Activate 3 X Digital Zoom

- Hold on to the “Up” and “Down” buttons to zoom in or out
- Press on “Photo/Playback” button once to take a photo

Photo Playback

- Hold on to the “Photo/Playback” button for 3 seconds to change to playback mode



Sample of the photo playback view

- Toggle with the “Up” and “Down” buttons to select the respective photo to view

- Press on “O” button to select
- Toggle with the “Up” and “Down” buttons to scroll thru the photos
- To go back to camera mode, hold on to the “Photo/Playback” button for 3 seconds again

Delete All Photos from the camera

- Under playback mode, press on “M” button to delete
- Press on “O” button to delete
- Toggle with the “Up” and “Down” buttons to “ALL” to delete that specific photo
- Press on “M” button to again to Exit

Delete Individual Photo from the camera

- Under playback mode, toggle with the “Up” and “Down” buttons to select the individual photo you wish to delete
- Press on “O” button after you have highlighted the photo in Yellow
- Press on “M” button
- Toggle with the “Up” and “Down” buttons to “YES”
- Press on “O” button to confirm

GPS Function*

This is an optional function which allows the DVR's location to be displayed against a map backdrop either in real time or when analysing the track later.

Note: *Only applicable to users who purchase the gps logger from Maka GPS Technologies Pte Ltd.

Activation of GPS Logger



Sample View of the recording with the GPS Logger



- GPS Logger is not lock

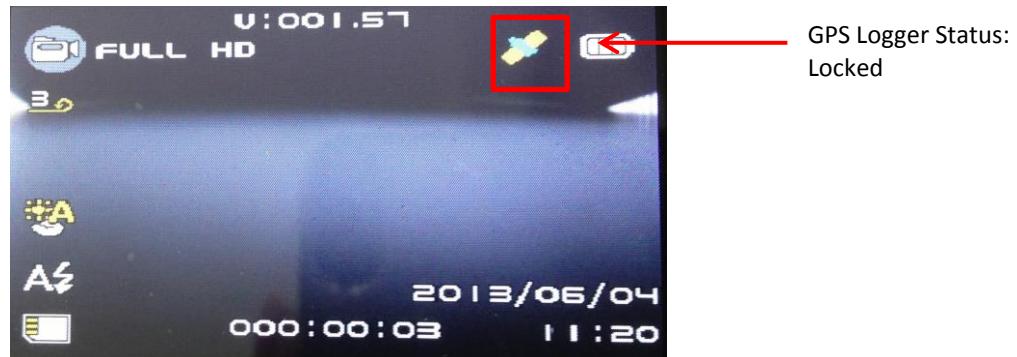


- GPS Logger locked

- Plug in the car charger to the GPS Logger's USB port as shown below.
(Note: this is a compulsory action for GPS logger to be locked.)



- Wait for estimated 2 to 3 minutes to capture the GPS signals from the satellites
- Once its locked as shown on the sample view below, drive as per normal.

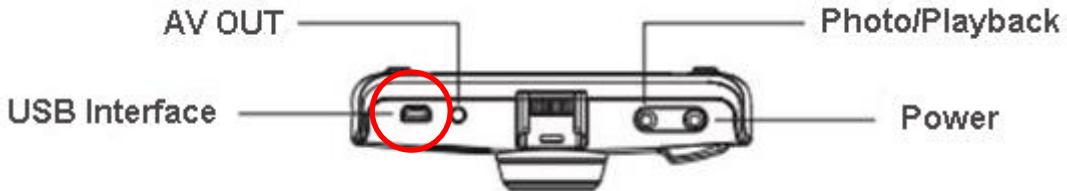


Sample View of the recording with the GPS Logger

Mapping GPS tracks via Computer

To sync with your computer

Step 1: Plug your USB cable into your DVR's USB port shown below

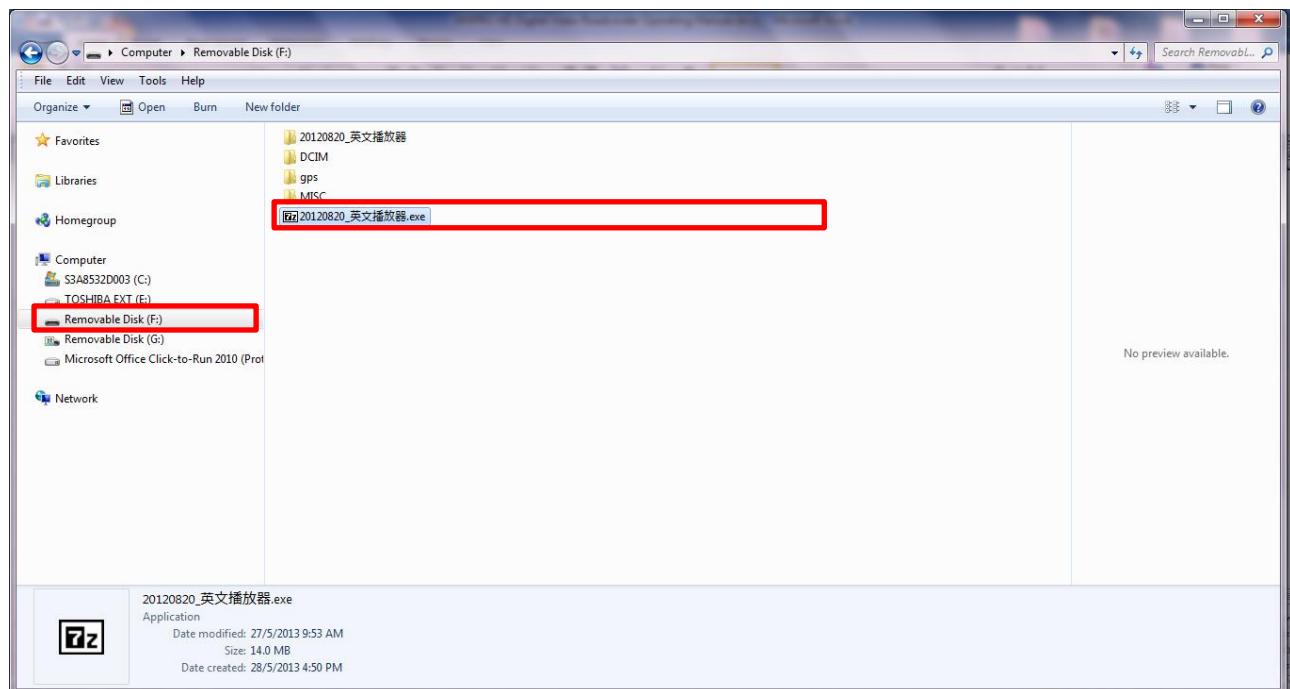


Top View of Marbella MXPRO

Step 2: Plug the other side of your USB to the computer

Step 3: Your computer will detect 2 Removable Drive:

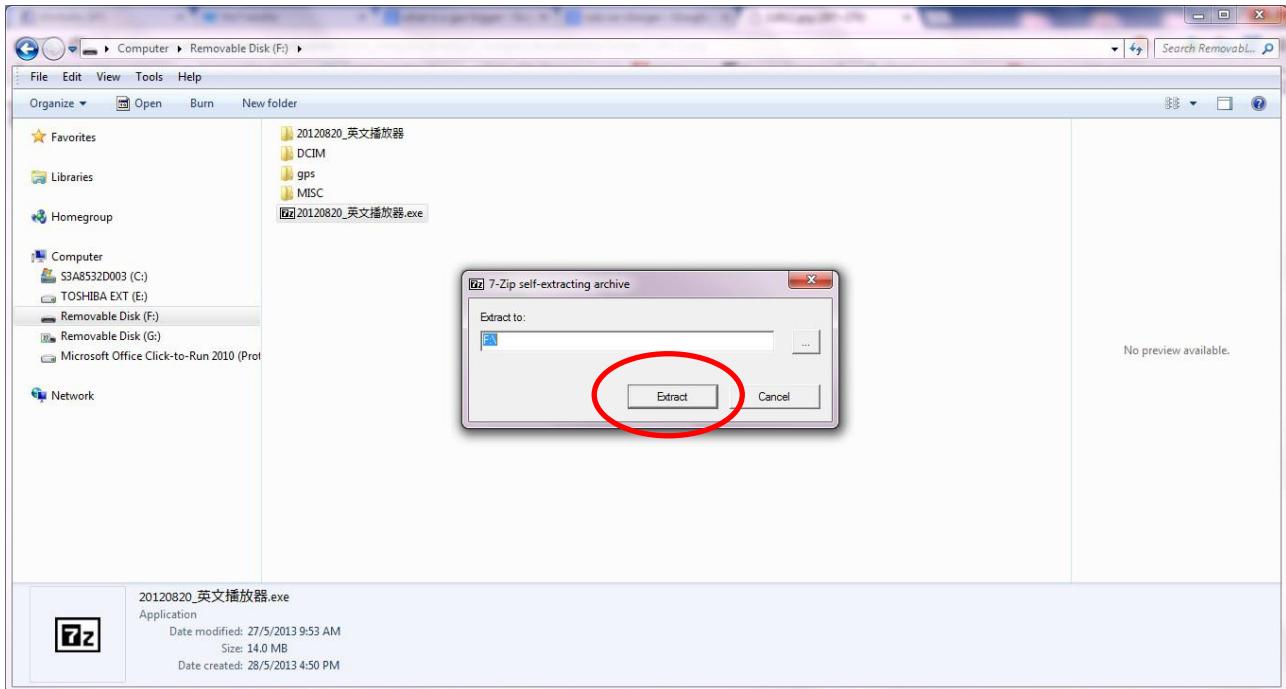
Removable Drive 1 – Internal Memory
Removable Drive 2 – External Memory (MicroSD Card)



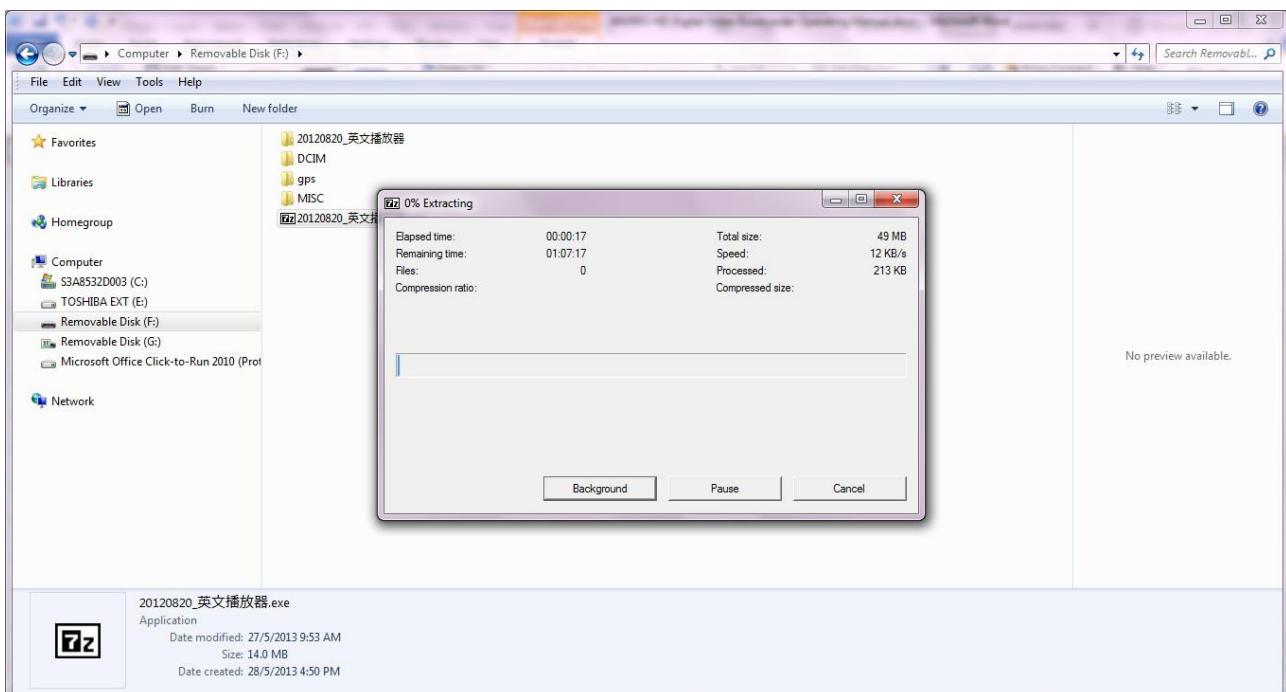
Step 4: Select Internal Memory Drive as shown in the sample above: Removable Drive (F:)

Step 5: Double-click on "20120820_英文播放器.exe"

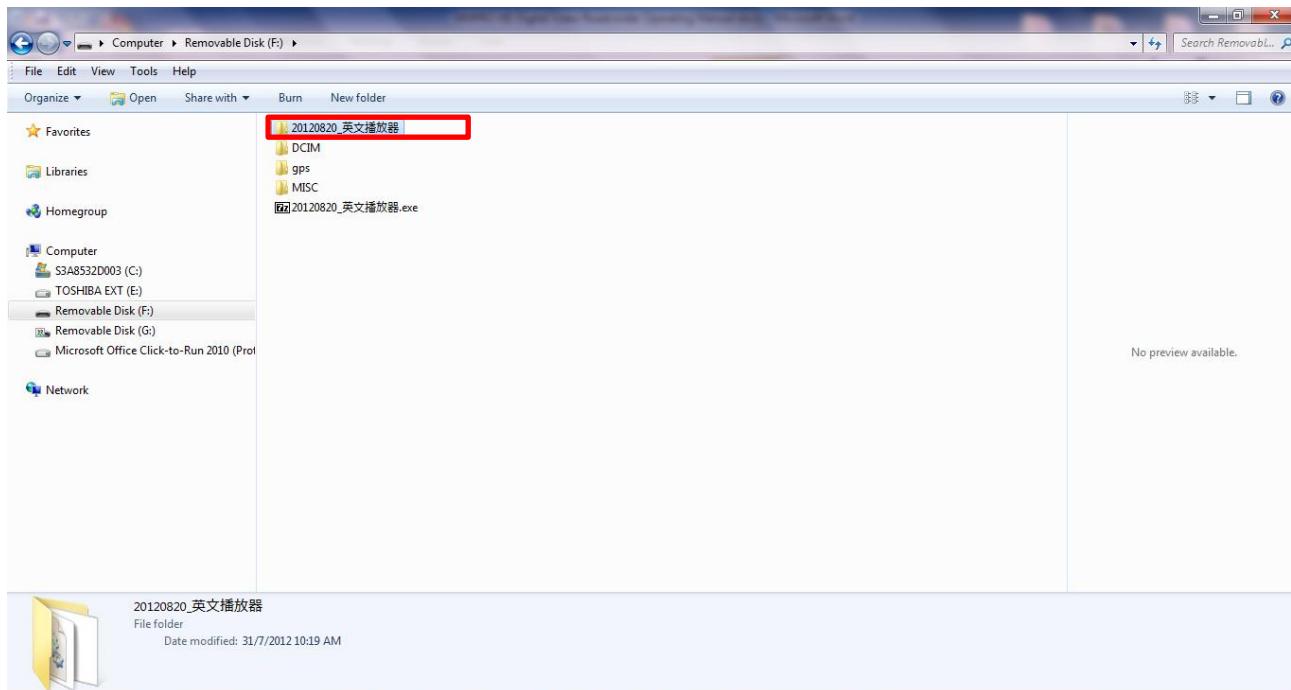
Step 6: Click on “Extract” button



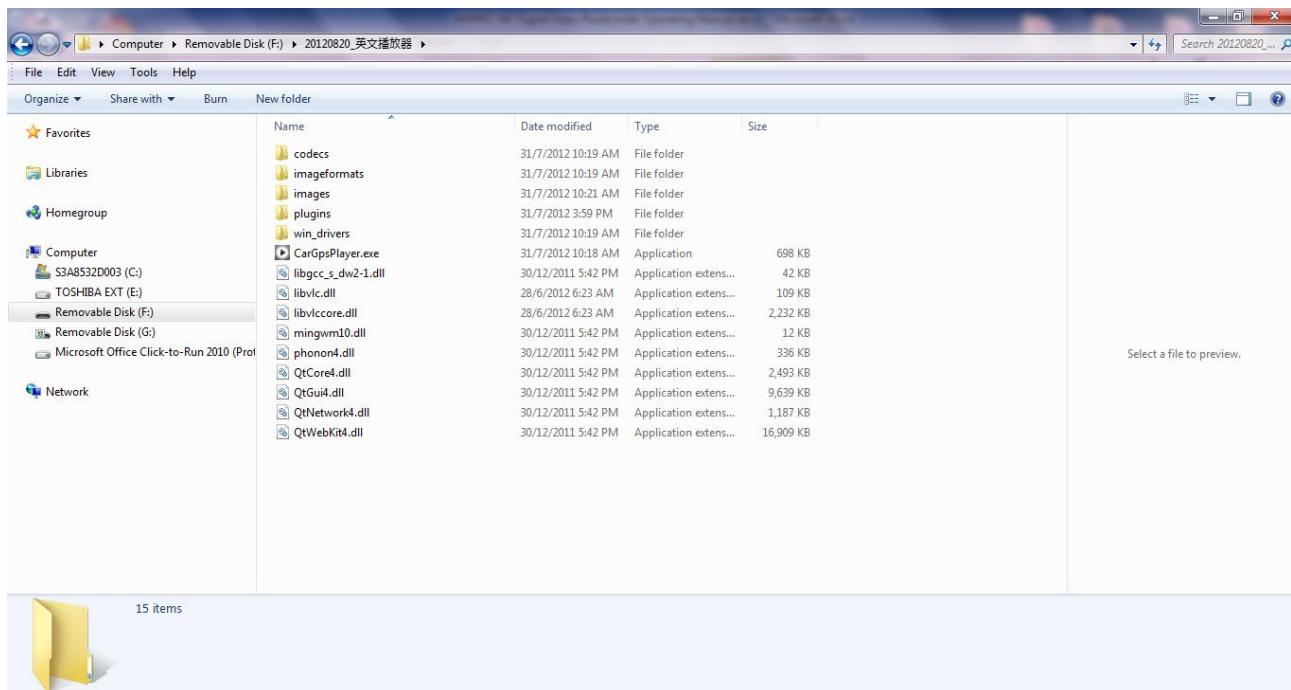
Step 7: Wait for 1 minute while it is extracting



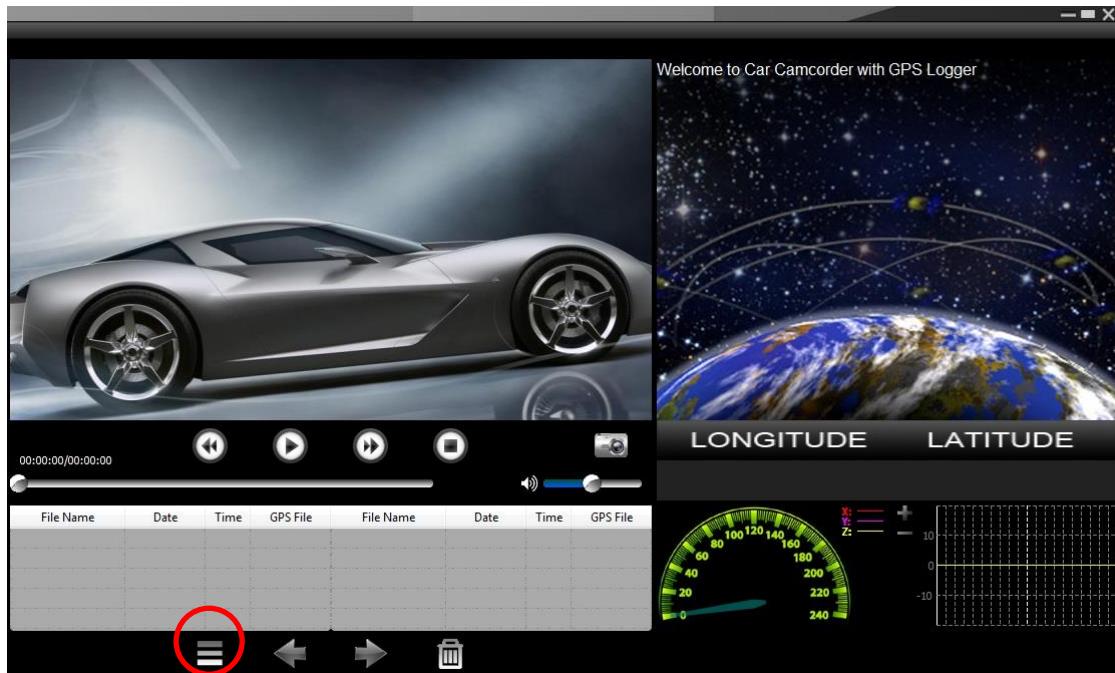
Step 8: A new folder named “20120820_英文播放器” will be created. Double-click on the folder.



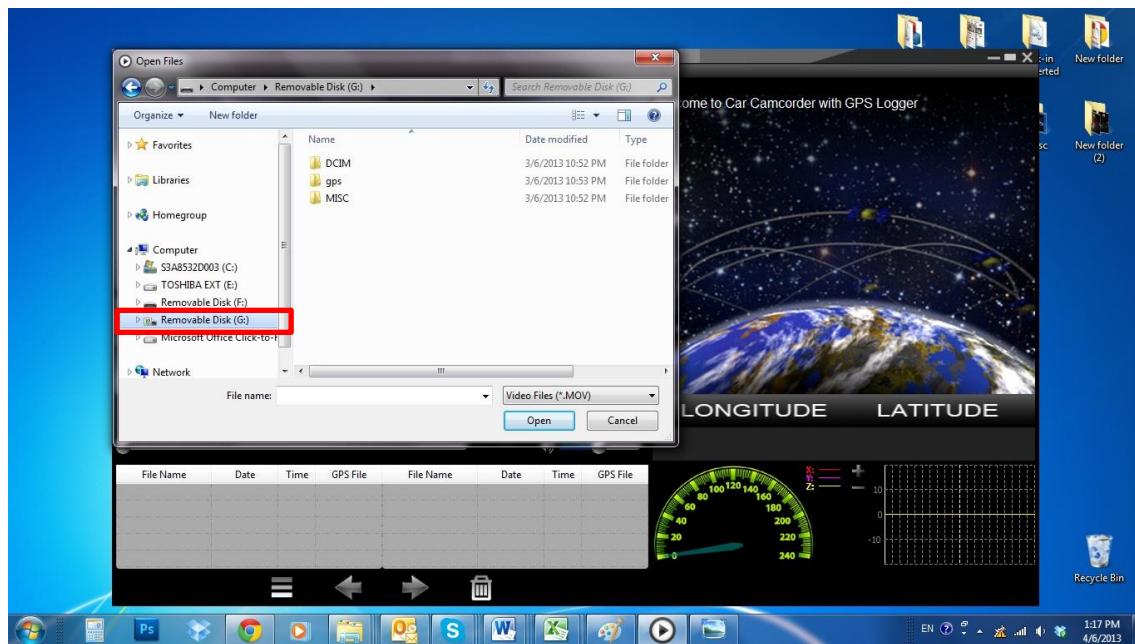
Step 9: Double-click on the “CarGpsPlayer.exe”.



Step 10: This program will bring you the page. Click on the folder option as highlighted in the image below.



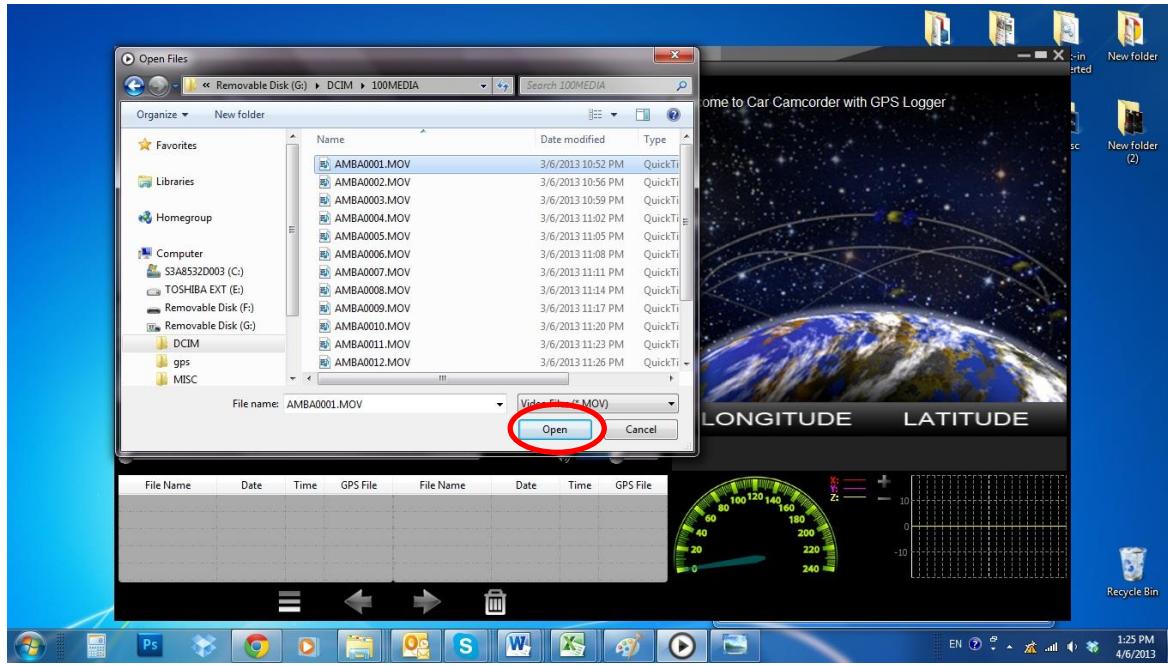
Step 11: Select the Removable Drive 2 – External Memory (MicroSD Card) as shown in the sample below: Removable Drive (G:)



Step 12: Double-click on “DCIM folder”

Step 13: Double-click on “100 Media folder”

Step 14: Select videos which you would like to play and click on “Open”



Step 15: Select videos which you would like to play and click on “PLAY” button

